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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/659,156

09/10/2003

Michael Wayne Bricker

18013 (AT 20958-43)

3718

7590

05/17/2004

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EXAMINER

NGUYEN, CHAU N

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,156

Applicant(s)

BRICKER ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 2, 3, 7, 8, 12, 16 and 17 are objected to because of the following informalities:

in claim 2, line 1, after "and" insert --said at least one twisted pair comprises--,

in claim 3, line 1, change "jacket" to --at least one spline--,

in claim 3, line 2, change "an" to --the--,

in claim 7, line 1, change "jacket" to --at least one spline--,

in claim 7, line 2, change "an" to --the--,

in claim 8, line 1, change "jacket" to --at least one spline--,

in claim 12, line 1, change "jacket" to --at least one spline--,

in claim 16, line 1, change "jacket" to --at least one spline--,

in claim 17, line 1, change "jacket" to --at least one spline--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tessier et al. (5,132,488).

Tessier et al. discloses a cable (Figs 1-3) comprising a round core comprising at least one twisted pair of insulated wires, and a jacket surrounding the core, the jacket comprising at least one splice projecting inward from an inner surface of the jacket, wherein at least a portion of the twisted pair is positioned between the spline and a center of the core (re claim 1). Tessier et al. also discloses the at least one spline comprising a plurality of splines projecting inward from the inner surface of the jacket (re claim 3), the spline being continuously extending on the inner surface of the jacket (re claim 4), the spline extending along a longitudinal axis of the core (re claim 5), the jacket being extruded over the core (re claim 6), the at least one spline comprising at least two splines projecting inward from the inner surface of the jacket, the splines being equally spaced from one another (re claim 7), the at least one spline comprising four splines (re claim

8), and the spline projecting radially inwardly from the inner surface of the jacket (re claim 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyasu et al. (2003/0205402).

Koyasu et al. discloses a cable comprising a round core comprising a plurality of twisted pairs of insulated wires arranged around a filler, a jacket surrounding the core, and at least one spline (Fig. 28), wherein at least a portion of each of the twisted pairs being positioned between the spline and a center of the core. Koyasu et al. does not specifically disclose the spline projecting inward from the inner surface of the jacket (or the spline being integral with the inner surface of the jacket). However, it would have been obvious to one skilled in the art to make the spline of Koyasu et al. as an integral part of the jacket (or projecting the spline inward from the inner surface of the jacket) to prevent the spline from moving with respect to the jacket since it has been held that forming in one piece an article which has formerly been formed in pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164.

7. Claims 10-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gareis (2003/0230427) in view of Patterson (476,484).

Gareis discloses a cable comprising a core comprising a central core filler (Figures 6B and 6C) and a plurality of twisted pairs of insulated wires extending about the core filler, and a jacket surrounding the core, the jacket comprising a round inner surface (re claims 10 and 19).

Gareis (Figures 6B and 6C) does not disclose at least one spline projecting inward from the inner surface of the jacket, wherein the at least one spline is adapted to prevent relative movement of the jacket and core without separating one of the twisted pairs from another of the twisted pairs (etc., the spline being short).

Patterson discloses a cable comprising a jacket and at least one spline (b) projecting inward from the inner surface of the jacket. It would have been obvious to one skilled in the art to provide the (Figures 6B and 6C) jacket of Gareis with at least one spline to prevent the cable from being buckled when the cable is bent as taught by Patterson. Noted that the spline taught by Patterson is short, accordingly the spline of Patterson in the (Figures 6B and 6C) cable of Gareis would be capable of preventing the relative movement of the jacket and core without separating one of the twisted pairs from another of the twisted pairs.

The modified (Figures 6B and 6C) cable of Gareis also discloses the central core filler being round (re claim 11), the at least one spline comprising a plurality of splines projecting inward from the inner surface of the jacket (re claim 12), the spline being continuously extending on the inner surface of the jacket (re claim 13), the spline extending along a longitudinal axis of the core (re claim 14), the jacket being extruded over the core (re claim 15), the at least one spline comprising at least two splines (re claim 16), the spline projecting radially inwardly from the

inner surface of the jacket (re claim 18) and being equally spaced about the core filler (re claim 20).

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gareis in view of Patterson as applied to claim 10 above, and further in view of Tessier et al.

Claim 17 additionally recites that there are four splines projecting inward from the inner surface of the jacket. Tessier et al. discloses a cable comprising a jacket and four splines projecting inward from the inner surface of the jacket. It would have been obvious to one skilled in the art to provide the (Figures 6B and 6C) jacket of Gareis with four splines (of Patterson) which are equally spaced around the inner surface of the jacket to strengthen the cable jacket .

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831